At page 4 line 22, change "Figure 6A" to --Figure 5A--.

At page 5 line 3, change "Figure 6B" to --Figure 5B--.

At page 56 line 22, change "*Glycobiology*3" to --*Glycobiology* 3--.

**In the Claims:**

Please amend claims 20, 48 and 60 as follows:

a1

**20.** (Once amended) The reaction mixture of claim **19**, wherein the reaction mixture further comprises a second cell type that produces a nucleotide that is used as a substrate for the production of the sugar nucleotide [regeneration cycle].

a2

**48.** (Once amended) The cell of claim **47**, wherein the enzyme encoded by the heterologous gene is one or more of:

a GDP-mannose dehydratase, a GDP-mannose 3,5-epimerase, and a GDP-mannose 4-reductase;

a UDP-galactose 4' epimerase;

a UDP-GalNAc 4' epimerase;

a CMP-sialic acid synthetase;

a pyrophosphorylase selected from the group consisting of a UDP-Glc pyrophosphorylase, a UDP-Gal pyrophosphorylase, a UDP-GalNAc pyrophosphorylase, a GDP-mannose pyrophosphorylase, and a UDP-GlcNAc pyrophosphorylase;

a kinase selected from the group consisting of myokinase, pyruvate kinase, acetyl kinase, creatine kinase;

UDP-Glc dehydrogenase; and

pyruvate decarboxylase.

a3

**60.** (Once amended) The method of claim **59**, wherein the enzyme encoded by the heterologous gene is one or more of:

a GDP-mannose dehydratase, a GDP-4-keto-6-deoxy-D-mannose 3,5-epimerase, and a GDP-4-keto-6-deoxy-L-glucose 4-reductase;

a UDP-galactose 4' epimerase;

a UDP-GalNAc 4' epimerase;

a CMP-sialic acid synthetase;

a pyrophosphorylase selected from the group consisting of a UDP-Glc pyrophosphorylase, a UDP-Gal pyrophosphorylase, a UDP-GalNAc pyrophosphorylase, a GDP-mannose pyrophosphorylase, and a UDP-GlcNAc pyrophosphorylase; a kinase selected from the group consisting of myokinase, pyruvate kinase, acetyl kinase, creatine kinase;

UDP-Glc dehydrogenase; and

pyruvate decarboxylase.

## REMARKS

### Status of the Application

Claims 1-71 are pending with entry of this amendment.

### The Amendments

The amendment to claim 20 to specify production of the sugar nucleotide clarifies the use of the substrate and does not add any new matter.

The amendment to claims 48 and 60 to specify UDP-Glc dehydrogenase finds support at, for example, Figure 7C-D and page 5, lines 22-25.

### The Restriction Requirement

In response to the restriction requirement, Applicants hereby elect Group I, claims 1-27 drawn to a reaction mixture comprising an acceptor saccharide and a first type of plant or microorganism cell that produces a nucleotide sugar and a first recombinant glycosyltransferase.

Applicants respectfully traverse the restriction requirement because a showing of distinctness alone is not sufficient grounds to support a restriction requirement. A serious burden